Selective Call Forwarding

Selective Call Forwarding (CLASS sm) allows the subscriber to specify a list of telephone numbers that will be forwarded to a remote station. When a call is received from one of the numbers on the list, the call will automatically be forwarded to the designated station. When a call is received from a number that is not on the list, the call will be terminated to the called party's line.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Selective Call Forwarding	Special Call Forwarding	CNS

FEATURE OPERATION:

The customer must contact the telephone company to initiate Selective Call Forwarding service. A service order is required. The customer initiates control of the Selective Call Forwarding screening list contents as well as activation and deactivation of the service by dialing access codes as described below. Once the appropriate translations have been made to the customer's line the customer may activate, deactivate and/or use the service as follows.

(Note: Prior to the 1A ESS 1AE10.2 generic, it was necessary for the 1A ESS Selective Call Forwarding customers to also subscribe to Call Forwarding Variable in order to activate the service.)

1.   1AESS (Generic 1AE10.02 and later):

To activate the Selective Call Forwarding service, the customer must go off-hook and dial *63 (1163 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The telephone number the calls will be forwarded to.
- The service is now active.
- The number of entries on the list.
- The instructions for creating/adding to the list, removing subscribers entries from the list, reviewing the list.

To deactivate the service, the customer must go off-hook and dial *83 (1183 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now off.
- The number of entries on the list.
- The instructions for removing any subscriber list entry, removing all subscriber entered numbers.

2.	5ESS and DMS-100: To activate or deactivate the Selective Call Forwarding service, the customer must go off-hook and dial either *63 or *83 (1163 or 1183 for rotary dial). Once either access code has been successfully entered. the customer should receive an announcement providing the following information:

- The name of the service.
- The telephone number the calls will be forwarded to.
- The status of the service (active or inactive).
- The number of entries on the list.
- The instructions for creating/adding to the list. removing, reviewing the list, changing of service status (active to inactive, inactive to active).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.	This feature is available in the following central office switches:

Switch Type	Earliest Generic Release
DCO	17.2
EWSD	9
GTD-5	1.6.3.3
DMS-10	404.4
1AESS	1AE10*
5ESS	5E6
DMS-100	BCS31**

NOTE: * Available on an intraoffice basis with 1AE9.
** References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document. the availability of some services may be affected.

2.	The maximum directory number list size is pre-determined by the Local Exchange Company on a Company basis and can range from 2 to 31

3.	The serving central office switch must be equipped with the appropriate CLASS(sm) Selective Call Forwarding software and hardware. In order for this service to work on an interoffice basis, both the originating and terminating switches must be equipped with the CLASS(sm) and Common Channel Signaling (CCS) SS7 software and hardware and the interoffice trunks must be converted to SS7 The remote directory number ("forward to" number) does not have to be in a switch in the CLASS(sm) Calling Area or in a switch equipped with CLASS(sm) or SS7.

4.	This service is a "line" service and therefore cannot be assigned to subscribers with trunk

terminations (i.e., PBX with DID). This service is also unavailable to customers with the following types of lines: multiparty, hotel/motel, coin and coinless public. 1A ESS remote switching system lines (RSS), and Centrex attendant with console.

5. If the subscriber is served from a 1A ESS Generic 1AE10.02 and later switch, the subscriber no longer needs to have Call Forwarding Variable service in order for Selective Call Forwarding to work. However, even though the subscriber may have both Selective Call Forwarding (SCF) and Call Forwarding Variable (CFV) assigned to their line, they CANNOT have both services active at the same time. With the 1A ESS 1AE10.03 generic, the subscriber can have SCF and CFV services activated at the same time, if the Local Exchange Company equips their central offices accordingly.

6. References:

   o LSSGR (TR-TSY-000064), TR-TSY-000217 CLASS(sm) Feature: Selective Call Forwarding, FSD 01-02-1410, Issue 2, November 1988, Bulletin 1, February 1992.

   o TR-TSY-000220, CLASS(sm) Feature: Screening List Editing, Issue 2, March 1991.

CLASS is a service mark of Bellcore (Bell Communications Research, Inc.)

Selective Call Rejection

Selective Call Rejection (CLASS sm) provides the subscriber with the ability to block incoming calls from a pre-specified list of directory numbers. The subscriber to this feature builds a list of telephone numbers that they want automatically blocked. The pre-selected (blocked) directory numbers are routed to a standard central office announcement instead of the dialed number. Subscribers can also place the number of the last incoming call on their list, without having to know the telephone number, by dialing a special command code. However, this must be done PRIOR to receiving another call.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Selective Call Rejection	Call Block	CNS

FEATURE OPERATION:

The customer must contact the local telephone company to initiate Selective Call Rejection service. A service order is required. The customer initiates control of the Selective Call Rejection screening list contents as well as activation and deactivation of the service by dialing access codes as described below. Once the appropriate translations have been made to the customer's line the customer may activate, deactivate and/or use the service as follows.

1.   1AESS:

To activate the Selective Call Rejection service, the customer must go off-hook and dial *60 (1160 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now active.
- The number of entries on the list.
- The instructions for adding the last incoming number to the list, adding known numbers to the list, removing subscriber entries from the list, reviewing the list.

To deactivate the service, the customer must go off-hook and dial *80 (1180 for rotary dial). The customer will then receive an announcement providing the following information:

- The name of the service.
- The service is now off.
- The number of entries on the list.
- The instructions for removing any subscriber list entry, removing all subscriber entered numbers.

2.   5ESS and DMS-100

To activate or deactivate the Selective Call Rejection service. the customer must go off-hook and dial either *60 or *80 (1160 or 1180 for rotary dial). Once either access code has been successfully entered, the customer should receive an announcement providing the following information:

- The name of the service.
- The status of the service (active or inactive).
- The number of entries on the list.
- The instructions for adding the last incoming number to the list, adding removing, reviewing the list, changing of service status (active to inactive, inactive to active).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	Earliest Generic Release
DCO	17.2
EWSD	9
GTD-5	1.6.3.3
DMS-10	404.4
1AESS	1AE10*
5ESS	5E6
DMS-100	BCS31**

NOTE: * Available on an intraoffice basis with 1AE9.
** References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document. the availability of some services may be affected.

2. The maximum directory number list size is pre-determined by the telephone company on a company basis and can range from 2 to 31.

3. The serving central office switch must be equipped with the appropriate CLASS(sm) Selective Call Rejection software and hardware. In order for this service to work on an interoffice basis, both the originating and terminating switches must be equipped with the CLASS(sm) and Common Channel Signaling (CCS) SS7 software and hardware and the interoffice trunks must be converted to SS7.

4. This service is a "line" service and therefore cannot be assigned to subscribers with trunk terminations (i.e., PBX with DID) This service is also unavailable to customers with the following types of lines: multiparty. hotel/motel. coin and coinless public. 1A ESS remote switching system

lines (RSS), and Centrex attendant with console.

5.   The announcement the rejected call is routed to is a telephone company recorded announcement (not customer changeable).

6.   References:

    o   TR-TSY-000218 CLASS(sm) Feature: Selective Call Rejection, FSD 01-02-0760, Issue 2, November 1988. Bulletin 1. February 1992.

    o   TR-TSY-000220. CLASS(sm) Feature: Screening List Editing, Issue 2, March 1991.

CLASS is a service mark of Bellcore (Bell Communications Research, Inc.)

Speed Calling

Speed Calling (eight number) allows a subscriber to establish a connection to certain directory numbers by dialing one digit instead of seven to ten digits. The service has a limit of eight speed calling access codes (each single digit code is associated with a telephone number).

Speed Calling (thirty number) allows a subscriber to establish a connection to certain directory numbers by dialing two digits instead of seven to ten digits. The service has a limit of 30 speed calling access codes (each two digit code is associated with a telephone number).

The telephone numbers associated with access codes of a speed call list are determined by the client. The client has the ability to add or change the telephone numbers assigned to such codes through use of the client's station.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Speed Calling	Speed Calling - 8 & 30 Number	CNS

FEATURE OPERATION:

1. To call any of the directory numbers assigned to a Speed Call list, the subscriber performs the following operations:

   a. Listen for dial tone.
   b. Dial the one or two-digit Speed Call code assigned to the desired directory number. After a four-second pause, the call is processed. (Callers from Touch-Tone telephones can avoid the four-second pause by dialing # after the Speed Call code.)

2. To change any numbers or to add a number to the Speed Call list, the following operations are performed from the subscriber's line:

   a. Listen for dial tone.
   b. Dial the applicable Speed Call change code (typically three or four digits).
   c. After receipt of second dial tone, dial the Speed Call code that is changing or being added and then dial the new directory number associated with the Speed Call code. (If a fast busy tone is encountered the action must be repeated because the change did not occur.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	Earliest Generic Release
DCO	14.1
EWSD	7
GTD-5	1.6.2.1
VIDAR	7.0.1.2
ITT-1210	7.2
DMS-10	208.1
1AESS	1AE8A
5ESS	5E2(2)
DMS-100	BCS17
#2EAX	1.2.9.1

2. The maximum number of digits in the telephone number assigned to the Speed Call code is 15 in the 1AESS. 32 in the 5ESS and 15 in the DMS-100.

3. Multiline subscribers can have Speed Calling on each line if desired.

4. Speed Calling can be used in conjunction with Three-Way Calling or Three-Way Call Transfer if the subscriber wishes to add to an established call someone who is on their Speed Call list.

5. Subscribers with Speed Calling (eight-number) can also have Speed Calling (thirty-number) OR Shared Speed Calling (two-digit) on the same line. Subscribers with Speed Calling (thirty-number) can also have Speed Calling (eight-number) OR Shared Speed Calling (one-digit) on the same line.

6. References:

    o   LSSGR (FR-NWT-000064), FSD 01-02-1101. Speed Calling, Issue 1. July 1989, Module TR-TSY-000570.

Three Way Call Transfer

Three Way Call Transfer provides the ESP who is on an established call with the ability to add another party to perform a three way conference. After establishing the conference, the ESP may drop their connection without disconnecting the remaining two parties. This action allows the ESP to transfer specific calls and free their line to initiate or receive another call.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Three Way Call Transfer	User Transfer	BSE

FEATURE OPERATION:

1.   To transfer an established call: Advise first party, then depress the receiver button (recall dial tone is heard), dial number of the third party (hear ringing), announce the call, depress the receiver button to add on the first party, then hang up.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This feature is available in the following central office switches:

Switch Type	Earliest Generic Release
DCO	17.3
EWSD	7
GTD-5	16.2.1
DMS-10	305.2
1AESS	1AE8A*
5ESS	5E5*
DMS-100	BCS29

*   Note that on the 1A ESS and 5ESS, this is made available by placing customers in a Centrex common block.

2.   An additional option for the ESP with Centrex is to allow calls to be transferred outside of the Centrex environment. This optional feature is known as DID/DOD Transfer.

3.   Call Forwarding Variable is compatible with Three Way Call Transfer service.

4.   Call Hold and Three Way Call Transfer can be assigned to the same line.

5. Call Pickup and Three Way Call Transfer can be assigned to the same line.

6. Speed Calling and Three Way Call Transfer can be assigned to the same line.

7. Three Way Call Transfer may be assigned to either or both parties on a Two-Party Line.

8. Three Way Call Transfer may not be provided on the following lines:

- o Coin Lines
- o Denied Originating Lines
- o Four and Eight Party Lines
- o PBX Lines
- o Hotel/Motel Calls Routed to TSPS

9. References:

- o FR-NWT-000064 - FSD 01-02-1305, Add-On Transfer and Conference Calling Features, Issue 1, September 1989, Module TR-TSY-000579.

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Uniform 7 Digit Access Number - Remote Call Forwarding

This capability provides a uniform seven-digit telephone number which can be dialed without an NPA prefix and is remotely call forwarded to an ESP, thereby giving an appearance of a local presence. The subscriber (ESP) may pay all end user customer usage charges and can specify a custom routing arrangement with either a central location or multiple locations throughout a LATA.

This capability uses Remote Call Forwarding technology, simulated facility groups and a dedicated NXX code. Custom Routing is an added feature.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Uniform 7 Digit Access Number - Remote Call Forwarding	Foreign Exchange	BSE

FEATURE OPERATION:

To reach a subscriber, a client dials the seven digit number assigned by the telephone company. The call is routed to the central office switch where the translations for the capability reside. From there the call is directed to the destination specified by the subscriber. The number of simultaneous calls that can be directed to a destination is controlled by a Simulated Facility Group. Calls are completed via the Public Switched Network. To reach a subscriber with Custom Routing, a client dials the seven digit number assigned by the telephone company. The call is translated in the originating switch and directed to the destination specified by the subscriber. Since the translations are done in each originating switch, each switch can direct calls to a different destination. A Simulated Facilities Group is established in each end office switch with Custom Routing to limit the number of simultaneous calls that can be forwarded from that switch. Calls originating in switches without translations for this capability are routed to an announcement. Calls are completed via the Public Switched Network.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1   This feature is available in the following central office switches:

Switch Type	Earliest Generic Release
DCO	15.1
EWSD	7
GTD-5	1.6.3.3
VIDAR	7.0.1.2
DMS-10	208.1
1AESS	1AE8A
5ESS	5E2(2)
DMS-100	BCS19
#2EAX	1.2.9.1

2.   To establish this capability and to change an established arrangement for this capability requires a service order.

3.   Subscribers desiring the Custom Routing option must specify the central office switches they wish to serve. Calls originating in an area that has not been designated as part of a Custom Routing area will receive a vacant code announcement.

4.   References:

      o   Reference for Remote Call Forwarding: LSSGR (FR-NWT-000064), FSD 01-02-1402, Remote Call Forwarding, Issue 1, October 1989, Module TR-TSY-000581.

This service. if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

2. Technical Descriptions for Packet Switched Serving Arrangements

Call Detail Recording Reports (Packet)

This service will provide the ESP with a data record of all calls made to their telephone number. The record will include called and calling NTN (Network Terminal Number), date. time of day, number of segments and the duration of the call.

The call details will not be delivered in real time, but as a paper or magnetic tape output. The technology to provide Call Detail Recording is resident in two systems: first, the packet switch where the call originates must have recording capability, and second. the GTE data processing system must be able to sort the recording information and extract the call details on calls made to the ESP's called number.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Call Detail Recording Reports (Packet)	Call Detail - Packet	CNS

FEATURE OPERATION:

See above description.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. Two reports may be provided either as paper or magnetic tape output, the Summary Report or the Detailed Report. The two reports may be sorted by three key elements:

    - NUI - Network User Identification
    - Calling NTN (Network Terminal Number)
    - Called NTN (Network Terminal Number)

2. The actual information and report format may vary by company.

3. References:

    o   PPSNGR TR-TSY-301, Issue 2. December 1988, Section 8, Bulletin No. 1, December 1989. Supplement 1, May 1990

This service, if offered as a BSE. is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Fast Select Acceptance - Packet

Fast Select Acceptance is an optional feature which works in conjunction with the Fast Select Request facility. This capability allows the called Data Terminal Equipment (DTE) to receive user data in the call setup packet. The terminating (called) DTE must be subscribed to the Fast Select Acceptance facility to receive Fast Select call. If the terminating DTE does not subscribe to Fast Select Acceptance. the Data Circuit Terminal Equipment (DCE) would respond to the Fast Select Request call of the origination DTE with a clear indication packet. indicating that Fast Select Acceptance is not subscribed to.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Fast Select Acceptance - Packet	Fast Select	BSE or CNS

FEATURE OPERATION:

The Fast Select Acceptance feature permits the calling DTE to send up to 128 octets of user data in the call setup packet to a called DTE subscribed to the Fast Select Acceptance feature. The service is available in a restricted and unrestricted mode. In the unrestricted mode the called DTE has an option to accept the call request and exchange data packets. In the restricted mode the call request is cleared and only data associated with call setup and clearing is exchanged.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is defined in the International Telecommunication Union-Telecommunication Standardization Sector (ITU-TS) [formerly CCITT] X.25, X.75 and X.75' utilities as always required.

2. The PPSN Access Concentrator (AC) should support X.25 direct access and dial-in interfaces.

3. The ISDN Packet Handling Facility should support the X.25 direct access interface to the user and the X.75' interface to the PPSN.

4. References:

   o PPSNGR TR-TSY-301, Issue 2. December 1988. Section 3.2.6.11, Bulletin No. 1, December 1989, Supplement 1. May 1990.

This service. if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Fast Select Request - Packet

Fast Select Request is a Public Packet Switched Network PPSN optional per-call feature that allows user data to be included in the originating call request packet sent from the calling Data Terminal Equipment (DTE) to the called DTE. The called or terminating DTE must be subscribed to the Fast Select Acceptance facility to receive Fast Select Request calls.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Fast Select Request - Packet	Fast Select	BSE or CNS

FEATURE OPERATION:

The Fast Select Request service permits the calling DTE to send up to 128 octets of user data in X.25 call setup packets. The service can be provided in a restricted and unrestricted mode. In the unrestricted mode the called DTE has an option to accept the call request and exchange data packets. In the restricted mode the call request is cleared and only data associated with call setup and clearing is exchanged.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This feature is defined in the International Telecommunication Union-Telecommunication Standardization Sector (ITU-TS) [formerly CCITT] X.25, X.75 and X.75' utilities as always required.

2.   The PPSN Access Concentrator (AC) should support X.25 direct access and dial-in interfaces.

3.   The ISDN Packet Handling Facility should support the X.25 direct access interface to the user and the X.75' interface to the PPSN.

4.   References:

       o   PPSNGR, TR-TSY-000301, Issue 2, December 1988, Section 3.2.6.11, Bulletin No. 1. December 1989, Supplement 1, May 1990.

This service, if offered as a BSE, may be associated with the Packet Switched X.25 and X.75 basic serving arrangements.

3. Technical Descriptions for Dedicated Access Arrangements

Access To Clear Channel Transmission

This capability provides for 64 Kbps clear channel transmission on 1.544 Mbps dedicated lines.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Access To Clear Channel Transmission	Clear Channel Capability	BSE

FEATURE OPERATION:

This service offers 64 Kbps channel capacity on a dedicated point-to-point 1.544 Mbps high capacity circuit between two customer designated premises. It allows a customer to transport an all-zero octet over a DS1/1.544 Mbps high capacity channel, providing an available combined maximum 1.536 Mbps data rate. This arrangement requires the customer signal at the channel interface to conform to Bipolar with eight (8) Zero Substitution (B8ZS) line code as described in Technical References TR-NPL-000054 and TA-TSY-000342.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This service requires the customer to obtain a dedicated 1.544 Mbps point-to-point circuit for transport of multiple 64 Kbps channels and is subject to the availability of facilities.

2.   References:

    o   TR-NPL-000054 High Capacity Digital Service (1.544 Mbps) Interface Generic Requirements for End Users, Issue 1, April 1989.

    o   TR-INS-000342 High-Capacity Digital Special Access Service Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991.

This service if offered as a BSE is associated with the Dedicated High Capacity Digital (1.544 Mbps) basic serving arrangement.

Automatic Protection Switching

Automatic Protection Switching provides the ability to monitor a non-switched facility between the ESP premises and the wire center serving the premises and to automatically switch to a spare facility if the performance of the original facility degrades or fails. It requires compatible equipment at both the ESP premises and the serving wire center.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Automatic Protection Switching	Automatic Protection Switching	BSE

FEATURE OPERATION:

Automatic Protection Switching (APS) can be offered in two configurations. It can be offered as a stand alone APS for use with T1 carrier or as DS1 APS incorporated into a DS3/1 multiplexer unit.

The stand alone unit, in conjunction with an identical unit at the opposite end of the T1 carrier facility to be protected, switches from the primary T1 carrier facility to a standby facility upon detection of a loss of the 1.544 Mbps signal or of an unacceptable Bit Error rate. There are two T1/1.544 Mbps inputs from the line side of the unit, a primary input and the standby input. The inputs normally terminate on a cross connect device and are connected to the DS1 Access Link carrier facilities between the Serving Wire Center and the Customer Premises.

There is one 1.544 Mbps output port on the APS unit. In the central office it will be terminated on a digital cross connect frame for interconnection with other DS1 facility terminations or switch appearances. On a customer premises, it will be terminated on a standard Network Interface.

The DS1 APS method is accomplished by means of circuitry contained within the DS3/1 multiplexer. The low speed DS1 cards can have an optional APS capability on a DS3 basis. Some levels of protection are 1 for 4 and 1 for 7, depending upon the manufacturer of the multiplexer unit. This equipment is part of a DS3 or higher level transmission system and can not be applied to metallic-based T1 carrier. The facility side DS1 is internal to the multiplexer. The DS1 output of the multiplexer is terminated on a DS1 cross connect frame in the Serving Wire Center.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This capability must be deployed on a circuit by circuit basis when offered in a stand alone configuration.

2.   There is no feature interaction.

3   References:

o   OTGR: Network Maintenance: Network Element. Section 4, TR-TSY-000474, Issue 3.
    November 1989. Revision 2, July 1991

o   Specification of System Maintenance Messages at the OS/NE Interface, TA-NWT-000200,
    Issue 5. December 1990

o   DS1 AFPS For Digital Terminal System. TA-TSY-000435, Issue 1, Feb. 1987

o   TR-TSY-000238 Digital Channel Bank DTMF Code Select Signaling Channel Unit.
    Issued 1. December 1986

o   Automatic Protection Switching for SONET. SR-NWT-001756, Issue 1, October 1990

This service, if offered as a BSE, may be associated with the Dedicated Digital (< 64 kbps), Dedicated High
Capacity Digital (1.544 Mbps) and Dedicated High Capacity Digital (> 1.544 Mbps) basic serving
arrangements.

Bridging

Bridging allows the connection of three or more customer designated premises through a telephone company hub or bridge. The following are different types of bridging:

o Central Office Bridging provides the ability to connect multiple customer designated premises with 2 or 4 wire voice grade circuits.

o Series Bridging provides a tip-to-tip and ring-to-ring series completion of a metallic pair to up to 26 customer designated premises in a central office.

o Telegraph Bridging provides the ability to connect multiple customer designated premises with 2 or 4 wire telegraph circuits.

o Three Premises Bridging provides a tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a third customer designated premises.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Bridging	Bridging	BSE

FEATURE OPERATION:

See above description.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is independent of central office switch type.

2. Note that some LECs may not offer this feature in conjunction with the Category 3, Type K - Dedicated Digital (64 Kbps) BSA.

3. References:

o LSSGR (FR-NWT-000064), Section 4.2, Definition only, Feature number 20-11-0000, Bridge Lifters, Issue 2, April 1991, Module TR-TSY-000504

o FSD 20-02-2010 Bridged Services, Issue 2, April 1991, Module TR-TSY-000504.

This service, if offered as a BSE, may be associated with the Dedicated Metallic, Dedicated Telegraph, Dedicated Voice Grade, Dedicated Program Audio and Dedicated Digital (< 64 kbps) basic serving

arrangements.

Conditioning

Conditioning provides assured transmission quality on analog private lines for technical parameters such as frequency response. envelope delay distortion. signal to C-notched noise ratio and nonlinear distortion.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Conditioning	Conditioning	BSE

FEATURE OPERATION:

See above.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This feature is independent of central office switch type.

2.   References:

   o   PUB 41004 Data Communication Using Voiceband Private Line Channels.

   o   PUB 62103 D5 Data Conditioning for Multipoint Private Line Data Channel.

This service, if offered as a BSE, is associated with the Dedicated Voice Grade basic serving arrangement.

- 109 -

Data Over Voice (DOV) Service

Data Over Voice (DOV) service provides a point-to-point derived data channel over the same pair of wires used to provide local service. DOV can be used to connect a client to an ESP or between two ESP locations.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Data Over Voice (DOV) Service	DOVConnect	BSE

FEATURE OPERATION:

DOVConnect is established via a service order placed with the telephone company. Each line to be provisioned for DOVConnect will be equipped with a Voice Data Multiplexer (VDM) at the end user's location (CPE) and in the serving central office. The VDM at the serving central office directs voice traffic to the circuit switched network and the data traffic to another VDM, special access line, or to a data switch. Back-to-back VDMs will allow the ESP to connect to a client or another ESP location.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1.   This feature is independent of central office switch type.

2.   The derived data channel may support speeds up to 19.2 Kbps.

3.   Interoffice back-to-back VDM arrangements may be offered by some LECs.

4.   The pair of wires between the end user's location and the central office must be non-loaded.

5.   This service is not compatible with range extension or subscriber carrier equipment.

6.   References:

      o   SR-NPL-000665 Network Interface Specification: DOV/DVM Type 1, Issue 1, January 1987.

Derived Channels (Monitoring)

This capability provides an ESP's client with a connection via low-speed derived channel to a scanning device located in the central office. The scanning device communicates with a subscriber terminal unit (STU) on the ESP client's premises. The scanner transmits to the ESP (1) alert signals from the STU and (2) notification of breaks in the subscriber's local loop. Breaks can generally be detected within a 30- to 90-second interval.

Generic Name of ONA Service	GTE Product Name	BSE or CNS
Derived Channels (Monitoring)	ScanAlert	CNS

FEATURE OPERATION:

1. ESP clients with this capability will have their line connected to a scanning device in the central office upon receipt of an order by the telephone company.

2. A Subscriber Terminal Unit (STU) is placed on the client's premises by the ESP and is connected to the line and the client's alarm sensor.

3. The scanner will periodically poll each client's line for a supervisory low tone. The tone status will indicate a line outage, alarm, or if the line is okay.

4. Upon detection of a line outage or an alarm signal, the scanner will transmit an alarm message to a telephone company provided host computer which then transmits the alarm message to the appropriate ESP over a private line connection.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is independent of the central office switch type.

2. The client's line must be one-party.

3. This service may not work when certain range extension or subscriber carrier equipment is used on the client's line (end to end metallic facilities may be required).

4. The STU must be connected to the client's line using an appropriate interface device. The STU and clients other CPE must be compatible with the central office scanner.

5. The coded low tone transmitted by the STU is at 37 Hz frequency.

6. Polling of the client's line varies from approximately every 6 seconds to approximately every 30

seconds depending on the type of scanner deployed by the telephone company.

7. The ESP connection to the telephone company host computer is via a 3000 series private line.

This service, if offered as a BSE, may be associated with the Dedicated Voice Grade and Dedicated Alert Transport basic serving arrangements.